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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,049	08/15/2001	Ayahito Kojima	122.1464	9924

21171 7590 02/11/2004

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

NGUYEN, CHANH DUY

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 02/11/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,049

Applicant(s)

KOJIMA ET AL.

Examiner

Chanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,7,10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,7,10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3_6-8.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species of Figure 11 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that Species C should include both Figs.10 and 11, as well, taken in combination with Figs 1-6. This is not found persuasive because Figure 10 is a flow chart of Figure 9 which is different invention from Figures 11 and 12. For example, Figures 11 and 12 do not have mean weight operation part (27) as Figure 9 does. Thus, Figures 11-12, claims 1-3, 7, 10 and 11 are only Figures read on Species C. It appears that the statement "Species C should include both Figs.10 and 11" in the remarks is typographical error.

The requirement is still deemed proper and is therefore made FINAL.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The references listed on the Information Disclosure Statements filed on August 15, 2001, October 16, 2003, October 31, 2003 and December 30, 2003 have been considered by examiner; see attached PTO-1449.

Drawings

4. Figures 1-6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction

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or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1-3, 7 and 10-11 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Toshio (JP 2001134197) .

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Toshio discloses the prior art most closely resembling the subject matter of the claims including judging action of the number of sustain pulses during the sustain period, control part as well as gradation data.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kojima et al (U.S. Patent No. 6,072,448).

As to claim 1, Kojima discloses play apparatus plural cells in which light emission is carried out selectively, wherein the display brightness is determined by the number of times of said light emission and the total number of times of light emission in each cell of the display frame of a screen are varied (see column 2, lines 37-40). Kojima teaches a sustain frequency judgment part (11) that judges the occurrence frequency of said total number of times of light emission by monitoring the change in said total number of times of light emission (see column 8, lines 27-36); and a control part (16) that controls said total number of times of light emission based on the judgment result of said sustain frequency judgment part (see column 8, lines 53-57).

While this is unlike applicant's disclosed device, this reads on the broad claimed language.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 2-3, 7 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima in view of Todoroki et al (U.S. Patent No. 6,597,333 B2).

As to claim 2, note the discussion of Kojima above, Kojima does not mention a first threshold value and a second threshold value as recited in the claim. In same field of endeavor, Todoroki teaches a sustain frequency judgment part (39) judging whether a first state, in which said total number of times of light emission is over a fixed first threshold value (N_{ref}), occurs more than a fixed first frequency (setting number of pulses at brightness reduce value N_{ref}) (see Figure 3) , and whether a second state, in which said total number of times of light emission is under a fixed second threshold value ($N1$), occurs more than a fixed second frequency (setting number of pulses at initial value $N1$) (see Figure 5). . Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the circuit for reducing and increasing the number of the sustaining pulses as taught by Todoroki to the control part of Kojima so as to prevent a cracking on the plasma display panel, regardless of

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what pattern of a stationary is displayed on the plasma display panel (see column 5, line 65 through column 6, line 3).

As to claim 3, Todoroki clearly teaches control part decreases said total number of times of light emission when said first state occurs more than said fixed first frequency (see step a3 of Figure 3), and increases said total number of times of light emission when said second state occurs more than said fixed second frequency (see step c3 of Figure 5).

As to claim 7, Todoroki clearly teaches display apparatus as set forth in claim 2, wherein said sustain frequency judgment part judges that the occurrence frequency exceeds said fixed first frequency when the cumulative time of said first state in a fixed cumulative period (predetermined time) is over a fixed first value (see Figure 3), and that the occurrence frequency exceeds said fixed second frequency when the cumulative time of said second state in a fixed cumulative period (predetermined time) is over a fixed second value (see Figure 5).

As to claim 10, Todoroki teaches a gradation scale judgment part that judges the occurrence frequency of a fixed gradation scale is further provided, and said control part controls said total number of times of light emission based on the judgment results of said sustain frequency judgment part and said gradation scale judgment part (see column 11, lines 26-50).

As to claim 11, Todoroki teaches said sustain frequency judgment part judges whether a first state in which said total number of times of light emission is over a fixed first threshold value occurs more than a fixed first frequency, whether a second state in

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which said total number of times of light emission is under a fixed second threshold value occurs more than a fixed second frequency, and whether a third state in which the gradation scale calculated from the display data is over a third threshold value occurs more than a third frequency, and said control part controls said total number of times of light emission so as to decrease when said first state and said third state occur more than the first frequency and the third frequency, respectively (see Figures 3, 5 and column 11, lines 26-50).

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Steven Saras can be reached at 305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121

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Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

CN

C. Nguyen
February 5, 2004


CHANH NGUYEN
PRIMARY EXAMINER